

TTUHSC JHH SOP's "CAPE PLUS" Terminal Outcomes and Ability Statements		
Domain	Domain1	Foundational knowledge
Sub-domain	1.1	<b>Learner (Learner)</b> - Develop, integrate, and apply <i>knowledge</i> from the <u>biomedical sciences</u> to evaluate the scientific literature, explain drug action, solve therapeutic problems, and advance population health and patient-centered care.
	1.1.1	<b>Biochemistry</b> - Describe the structure, properties, biological functions, applicable kinetics, and metabolic fate of macromolecules that are essential to life (proteins, lipids, carbohydrates, and nucleic acids) and critical for understanding the development of adverse drug interactions, endogenous targets for drug therapy, and rational drug design strategies.
	1.1.2	<b>Human Anatomy</b> - Describe the structure of major human body systems at the cellular, tissue, organ, and system level.
Abilities	1.1.3	<b>Human Physiology</b> - Describe the functions, responses, interactions and homeostasis of non-diseased human cells, organs, and systems across the lifespan, and their foundation of pathophysiology and pharmacodynamics concepts.
	1.1.4	<b>Immunology</b> - Recognize human immune system components, innate and adaptive immune responses to vaccines, allergen, infection, injury, inflammation, medications and disease; and augmentation of the human immune system in disease.
	1.1.5	<b>Medical Microbiology</b> - Describe the structure, function, and properties of microorganisms (bacteria, viruses, parasites, and fungi) responsible for human disease, and rational approaches to their containment or eradication.
	1.1.6	<b>Pathology/Pathophysiology</b> - Recognize the basic principles, parameters and mechanisms of aberrant functions, clinical presentations, responses and metabolic sequelae of diseases.
	1.1.7	<b>Epidemiology</b> - the cause-and-effect patterns of health and disease in large human populations.
Sub-domain	1.2	<b>Learner (Learner)</b> - Develop, integrate, and apply <i>knowledge</i> from the <u>pharmaceutical sciences</u> to evaluate the scientific literature, explain drug action, solve therapeutic problems, and advance population health and patient-centered care.
	1.2.1	<b>Clinical Chemistry</b> - Apply clinical laboratory data to disease state management, including screening, diagnosis, progression, and treatment evaluation.
	1.2.2	<b>Extemporaneous Compounding</b> - Prepare sterile and non-sterile prescriptions which are pharmaceutically accurate regarding drug product and dose, free from contamination, and appropriately formulated for safe and effective patient use.
	1.2.3	<b>Medicinal Chemistry</b> - Explain the chemical basis of drug action and behavior in vivo and in vitro, with an emphasis on pharmacophore recognition and the application of physicochemical properties, structure and activity relationships, intermolecular drug-receptor interactions and metabolism to therapeutic decision-making.
Abilities	1.2.4	<b>Pharmaceutics</b> - Explain the physicochemical properties of drugs, excipients, and dosage forms important to the rational design and manufacture of sterile and non-sterile products.
	1.2.5	<b>Biopharmaceutics</b> - Apply biotechnology to the rational design of biologic-based therapies.
	1.2.6	<b>Pharmacogenomics/genetics</b> - Describe the genetic basis for disease and individual differences in metabolizing enzymes, transporters, and other biochemicals impacting drug disposition and action that underpin the practice of personalized medicine.
	1.2.7	<b>Pharmacology</b> - Apply drug-induced alterations of the human body for therapeutic decision-making, including pharmacodynamics, efficacy, interactions, and therapeutic and adverse effects on immediate and lifespan variations in physiology, pathophysiology, and biochemistry.
	1.2.8	<b>Toxicology</b> - Explain the pharmacodynamics, mechanisms, prevention, and treatment of the toxic effects of drugs and poisons, including poisons associated with bioterrorism.
	1.2.9	<b>Drug Development</b> - describe the process by which drugs are developed and brought to market, including drug stability, delivery, release, disposition, pharmacokinetics, therapeutic effectiveness, and the development of quality standards for drug products that lead to patents, premarket studies, and approval.
Sub-domain	1.3	<b>Learner (Learner)</b> - Develop product (both pharmacologic and non-pharmacologic) <i>knowledge</i> from the <u>clinical sciences</u> to assist in the evaluation of scientific literature, explain drug action, solve therapeutic problems, and advance population health and patient-centered care.
	1.3.1	<b>Brand and Generic Names</b> - Identify the brand and generic names of commonly prescribed medications.
	1.3.2	<b>Dosing Strategies</b> - Determine the most appropriate pediatric and adult dosing strategies including, interval and durations for medications for the common conditions in which they are indicated.
Abilities	1.3.3	<b>Storage Requirements</b> - Identify important storage requirements of medications.
	1.3.4	<b>Indications/Contra-indications</b> - Identify appropriate indications and contra-indications
	1.3.5	<b>General Administration Techniques</b> - Recommend appropriate use of pharmacologic and non-pharmacologic products.
	1.3.6	<b>Devices and durable medical equipment</b> - Apply knowledge of devices and durable medical equipment
Sub-domain	1.4	<b>Mathematics (Calculator)</b> - Utilize pharmaceutical and pharmacokinetics mathematics to perform accurate medication calculations.
	1.4.1	<b>Pharmaceutical Calculations</b> - Mastery of mathematical skills required to accurately prepare prescriptions (including extemporaneously compounded dosage forms) that are therapeutically sound and safe for patient use.
Abilities	1.4.2	<b>Basic Pharmacokinetics</b> - Mathematical determination of the rate of drug movement from one therapeutic or physiologic compartment to another which includes application of physicochemical and kinetic principles and parameters to therapeutically important issues, such as drug delivery, disposition, therapeutic effectiveness, and beneficial or adverse interactions in general and specific populations.
	1.4.3	<b>Clinical Pharmacokinetics</b> - Application of basic pharmacokinetic principles and mathematical models to calculate safe and effective doses of drugs for individual patients, and adjust therapy as appropriate through the monitoring of drug concentration in biological fluids.
Domain	Domain 2	Essentials for Practice and Care
Sub-domain	2.1	<b>Patient-centered care (Caregiver)</b> - Provide <i>patient-centered care</i> as the medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities).
	2.1.1	Collect information to identify a patient's medication related problems and health-related needs.
	2.1.2	Interpret information to determine disease presentation or the effects of medication therapy, identify medication-related problems, and prioritize health-related needs.
Abilities	2.1.3	Establish patient-centered goals and create a care plan for a patient in collaboration with the patient, caregiver(s), and other health professionals that is evidenced-based and cost effective.
	2.1.4	Implement a care plan in collaboration with the patient, caregivers, and other health professionals.
	2.1.5	Monitors and evaluates the effectiveness of care plans.
	2.1.6	Accurately documents patient encounters (including but not limited to: Adverse Drug Event Reporting, Monitoring notes, therapy initiation notes, etc) in patient charts, documentation systems, or other appropriate medium.
	2.1.7	Perform appropriate patient assessments.
Sub-domain	2.2	<b>Medication use systems management (Manager)</b> - Manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems.
	2.2.1	Compare and contrast the U.S. and Other Countries' health systems and reimbursement models.
	2.2.2	Analyze the root cause of medication errors.
	2.2.3	Describe the role of the pharmacist in applying standards, guidelines, best practices, and established processes related to safe and effective medication use.
	2.2.4	Utilize technology to optimize the medication use system.
	2.2.5	Manage healthcare needs of patients during transitions of care.
Abilities	2.2.6	Utilize continuous quality improvement techniques in the medication use process.
	2.2.7	Apply sound management principles (including operations, information, resource, fiscal, and personnel) and quality metrics to advance patient care and service delivery within and between various practice settings.
	2.2.8	<b>Health Informatics:</b> Implement effective and secure design strategies with use of electronic and other technology-based systems, including electronic health records, to capture, store, retrieve, and analyze data for use in patient care.
	2.2.9	<b>HIPAA:</b> Share health information in accordance with all federal policies.
	2.2.10	Oversee the pharmacy operations for an assigned work shift.
	2.2.11	Interpret and fulfill a medication order (including sterile and non-sterile products) with accurate preparation, labeling, dispensing, and distribution.
Sub-domain	2.3	<b>Health and wellness (Promoter)</b> - Design prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve health and wellness.
	2.3.1	Describe systematic preventive care, using risk assessment, risk reduction, screening, education, and immunizations.
Abilities	2.3.2	Provide prevention, intervention/triage, and educational strategies for individuals and communities to improve health and wellness.
	2.3.3	Conduct evidence-based evaluation of the therapeutic value, safety, and regulation of pharmacologically active natural products and dietary supplements.
	2.3.4	Recognize principles of self-care including the dimensions of wellness
	2.3.5	Provide immunizations to patients against vaccine-preventable diseases.
Sub-domain	2.4	<b>Population-based care (Provider)</b> - Describe how <i>population-based care</i> influences <i>patient centered care</i> and influences the development of practice guidelines and evidence-based best practices.
	2.4.1	Evaluate how the unique characteristics (social, cultural, religious, economic, and environmental) of a patient population can contribute to drug-related problems.
Abilities	2.4.2	Identify the needs of a targeted population considering cost, care, access, and patient satisfaction through an evidenced-based approach.
	2.4.3	Differentiate sex and gender considerations in health care.
	2.4.4	Participate in population health management by evaluating and adjusting interventions to advance safe and effective drug use and positive care outcomes within the pediatric population.
	2.4.5	Participate in population health management by evaluating and adjusting interventions to advance safe and effective drug use and positive care outcomes within the geriatric population.
Sub-domain	2.5	<b>Laws and Regulations (Rule-Follower)</b> - In all health care activities, recognize and comply with all federal, state, and local laws and regulations related to pharmacy practice medication distribution, use, and management systems.
	2.5.1	Comply with federal, state, and local laws and regulations related to <i>non-dispensing and dispensing</i> (excluding controlled substances) functions associated within all scopes of pharmacy practice.
Abilities	2.5.2	Practice according to the rules and legal requirements for dispensing, administering, storing, and ordering <i>controlled substances</i> in all pharmacy practice settings.
	2.5.3	Comply with federal and appropriate state-specific statutes, regulations, policies, executive orders, and court decisions that regulate the practice of pharmacy related to the <i>mitigation of prescription drug abuse and diversion</i> .
	2.5.4	Discuss laws and regulations regarding appropriate handling and disposal of hazardous and nonhazardous medications.
Sub-domain	2.6	<b>Drug Information Analysis and Literature Evaluation (Seeker)</b> - Assess information needs of patients and health providers and apply knowledge of study design and literature analysis to provide accurate, evidence-based drug information.
	2.6.1	Collect accurate and comprehensive drug information from appropriate sources.
Abilities	2.6.2	Recognize the type of content that is available in general (tertiary), secondary, and primary information sources.
	2.6.3	generate an effective drug information response.
	2.6.4	Differentiate among experimental models and methodology employed in clinical study design
	2.6.5	Recognize appropriate use of commonly employed statistical tests and management of data sets.
	2.6.6	Critical analysis and application of relevant health sciences literature and other information resources to answer specific patient-care and/or drug-related questions.
Sub-domain	2.7	<b>Business Models and Pharmacy Services (Analyzer)</b> - Evaluate existing business models associated with pharmacy practice and design strategies for development of new pharmacy services to meet healthcare needs.
	2.7.1	Utilize basic business principles within the framework of practice management
Abilities	2.7.2	Evaluate pharmacy services and business models for effectiveness, appropriateness, and efficiency.
	2.7.3	<b>History of Pharmacy:</b> Explore the evolution of pharmacy as a distinct profession, the transition from a focus on the drug to a focus on the patient and the drug (including pharmacist-provided patient care), and major milestones and contributors in the evolution of pharmacy.
	2.7.4	<b>Pharmaco-economics:</b> Apply economic principles and theories to the provision of cost-effective pharmacy products and services that optimize patient-care outcomes, particularly in situations where healthcare resources are limited.
Domain	Domain 3	Approach to Practice and Care
Sub-domain	3.1	<b>Problem Solving (Problem Solver)</b> - Identify problems; explore and prioritize potential strategies; and design, implement, and evaluate a viable solution.
Abilities	3.1.1	Identify and define the primary problem.
	3.1.2	Demonstrate scientific inquiry by developing, organizing, prioritizing, and defending multiple possible solutions.
Sub-domain	3.2	<b>Educator (Educator)</b> – Educate all audiences by determining the most effective and enduring ways to impart information and assess understanding.
Abilities	3.2.1	Educate patients/informal caregivers by determining the most effective and enduring ways to impart information and assess understanding.
	3.2.2	Educate peer health professionals by determining the most effective and enduring ways to impart information and assess understanding.
Sub-domain	3.3	<b>Patient Advocacy (Advocate)</b> - Assure that patients’ best interests are represented.
Abilities	3.3.1	Ascertain and incorporate patients goals into clinical decision making
	3.3.2	Assist patients in navigating the complex healthcare system.
	3.3.3	Ensure patients obtain the resources and care required in an efficient and cost-effective manner (e.g., patient medication assistance programs and triage to social and/or other healthcare services).
Sub-domain	3.4	<b>Interprofessional collaboration (Collaborator)</b> – Actively participate and engage as a member of a healthcare team
Abilities	3.4.1	<b>Values and Ethics</b> for interprofessional practice: Work with individuals of other professions to maintain a climate of mutual respect and shared values.
	3.4.2	<b>Roles and Responsibilities:</b> Use the knowledge of one’s own role and those of other professions to appropriately assess and address the health care needs of patients and to promote and advance the health of populations.
	3.4.3	<b>Interprofessional Communication:</b> Communicate with patients, families, communities, and professionals in health and other fields in a responsive and responsible manner that supports a team approach to the promotion and maintenance of health and the prevention and treatment of disease.
	3.4.4	<b>Teams and Teamwork:</b> Apply relationship-building values and the principles of team dynamics to perform effectively in different team roles to plan, deliver, and evaluate patient/population-centered care and population health programs and policies that are safe, timely, efficient, effective, and equitable.
Sub-domain	3.5	<b>Cultural sensitivity (Includer)</b> - Recognize <i>social determinants of health</i> to diminish disparities and inequities in access to quality care.
Abilities	3.5.1	Recognize the social determinants of health that affect the access to care and care outcomes.
	3.5.2	Assess a patient’s health literacy and modify communication strategies to meet the patient’s needs.
	3.5.3	<b>Cultural Competency:</b> Explain the impact of cultural values, beliefs, and practices on patient care outcomes.
Sub-domain	3.6	<b>Communication (Communicator)</b> – Effectively communicate verbally and nonverbally when interacting with an individual, group, or organization.
Abilities	3.6.1	Interview patients using an organized structure and techniques such as motivational interviewing, active listening, and open/closed-ended questions to gather information
	3.6.2	Determine the most appropriate communication strategies (verbal, non-verbal, and written) to meet the needs of the individual, group, or organization, including adaptation of terminology as appropriate for the audience.
	3.6.3	Communicate assertively, persuasively, confidently, and clearly.
	3.6.4	Demonstrate fluency with language of instruction (grammar, spelling, syntax)
Domain	Domain 4	Personal and Professional Development
Sub-domain	4.1	<b>Self-awareness (Self-aware)</b> – Examine and reflect on personal knowledge, skills, abilities, beliefs, biases, motivation, and emotions that could enhance or limit personal and professional growth.
Abilities	4.1.1	Utilize resources to participate in self exploration
	4.1.2	Perform self assessment/reflection
	4.1.3	Demonstrate emotional intelligence
	4.1.4	Develop skills to support resilience
	4.1.5	Incorporate newly learned abilities into both personal and professional life
	4.1.6	Document continuing professional development (CPD)
Sub-domain	4.2	<b>Leadership (Leader)</b> – Demonstrate responsibility for creating and achieving shared goals, regardless of position.
Abilities	4.2.1	Identify characteristics that reflect leadership versus management.
	4.2.2	Demonstrate behaviors that support collaboration and consensus building
	4.2.3	Demonstrate skills in task/project management, including time management, organization, and workflow execution
	4.2.4	Know principles of change management
	4.2.5	Know ethical principles in areas such as bioethics, institutional compliance, and professional integrity
Sub-domain	4.3	<b>Innovation and Entrepreneurship (Innovator)</b> - Engage in innovative activities by using creative thinking to envision better ways of accomplishing professional goals.
Abilities	4.3.1	Generate new ideas to help improve personal, organization, and/or pharmacy profession missions.
	4.3.2	Demonstrate strategic planning skills through creative thinking to transform ideas into novel strategies
	4.3.3	Demonstrate marketing/persuasive skills to disseminate ideas
Sub-domain	4.4	<b>Professionalism (Professional)</b> - Exhibit behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society.
Abilities	4.4.1	Personal Appearance - Maintain personal appearance consistent with the image of the profession.
	4.4.2	Attendance and engagement - Demonstrate punctuality and consideration for class, group or work schedules
	4.4.3	Follow-through on Tasks - Demonstrates follow through with responsibilities and adjusts work style as needed to achieve milestones.
	4.4.4	Appropriate Technology Use - Demonstrates appropriate use of electronic devices and social media platforms.
	4.4.5	Self-Directed / Accountable - Demonstrate accountability and self-direction while undertaking tasks to exceed minimal standards and deadlines.
	4.4.6	Efficient Use of Time - Demonstrates effective time management skills, including adequate preparation for all personal and practice-related responsibilities and adherence to deadlines.
	4.4.7	Behaves in Ethical Manner - Exemplifies high ethical standards through honesty, acting in other's best interests, and by holding self and others accountable for professional conduct.
	4.4.8	Demonstrates Empathy - Demonstrates empathy and an appreciation of the concerns of others.
	4.4.9	Accepts Constructive Feedback - Utilizes constructive feedback to improve both efficiency and effectiveness of performance.